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Experience Design: It's Not Just For Disneyland Anymore

There seems to be a new debate arising in the field of web design: usability versus experience. At this point the first part of the debate, usability design, should be a familiar concept to even the most novice of web designers. Since 1994 Dr. Jakob Nielsen has been evangelizing that those responsible for creating web sites should focus on making those sites usable above all other concerns. The other side of the debate, experience design, has only recently emerged in the field of web design. In the current debate experience design is largely viewed as being concerned mainly with creating a visually stunning design, even at the expense of creating a usable site. However, this is a limited view of experience design. Experience design, rather than only being concerned with intriguing visual design, is a balanced combination of all of the elements that go into creating websites, including issues of usability. The real issue is not usability versus experience, but how much emphasis usability should be given in creating the best user experience.

History of Usability Design on the Web

Usability concerns did not start, and will not end, with web design. There is a long history of focusing on usability when designing interfaces on computers; the major desktop GUIs have been subjected to countless hours of usability testing to reach the point that they are at today. But usability extends to other markets and sectors as well; it seems almost impossible that any car that introduces wildly new features (GPS-enabled direction, complex Audio/Video systems,

etc.) could reach the showroom floor without at least some minimal usability testing. Usability concerns are not a new issue on the web either. While there have been designers and others concerned with usability issues on the web since its inception (we need only to stop and think about the creators of SGML and HTML in order to see that usability was a concern very early on), the current usability craze began around 1994 when Jakob Nielsen transferred his knowledge of users' computer interactions to the emerging web. Since that time countless authors have taken on the subject of web usability. However, Nielsen still remains the major voice and evangelist on this issue.

In 1995 Nielsen began publishing his *Alertbox* column, which is now one of the main sources for usability information and evangelism (Nielsen x). Nielsen's *Alertbox* column covers a wide array of topics in web usability, from the appropriate use of Macromedia Flash to web usability for children, from guidelines for error messages to web usability top ten lists. These top ten lists are probably the most famous (or perhaps most infamous) feature of the *Alertbox* series. Nielsen's top ten lists have covered the top ten intranet designs and the top ten good things being done in web design. However, they are mostly known because of his sporadically published "Top Ten Mistakes in Web Design" columns, which have included such things as using frames, having long URLs, and using non-standard link colors (Nielsen1996). Many of the mistakes that Nielsen listed first in his first web design mistakes list in 1996, have reappeared on later lists, including his most recent, published in December 2002.

Nielsen has also published (and been involved with the publishing of) multiple books on the subject of web usability, including the very popular *Designing Web Usability*, in which he tackles issues related to page design, content design, site design, etc. Again, Nielsen covers a wide range of topics in this book in the hopes of persuading web designers to consider usability

in their work. Many of the issues that Nielsen touches on in his *Alertbox* column have been expanded here, including the use of non-standard link colors:

Most web browsers use two different colors to display links: Links to pages the user has not seen yet are typically displayed in blue, whereas links to pages that the user did see earlier are displayed in purple or red. It is critical for web usability to retain color coding in your link colors. Although it is unnecessary to use exactly the same shade of blue as the browser default, unvisited links must unmistakably be blue and visited links must unmistakably be reddish or purple.

(62)

Designing Web Usability is full of advice like this aimed at helping designers to create usable sites.

While Nielsen is likely the most turned to voice in web usability, he is hardly the only one. Countless authors have taken on this subject since the explosion of the web in the early '90s. It seems that much of what these authors have to say is, if not derived directly from, in line with what Nielsen says about web usability. However, from time to time disagreements arise. In *Web Style Guide* (not necessarily a web usability guide, but a book that is certainly concerned to a great extent with web usability) Patrick Lynch and Sarah Horton suggest, "If you are introducing links in the body of your text, choose custom link colors that closely match your text color. Reading from the screen is hard enough without struggling with distracting link colors scattered across the page" (147). This directly contradicts the advice that Nielsen gives in

Designing Web Usability:

Blue text is slightly harder to read than text in other colors such as black or red (assuming white backgrounds) because the human eye has fewer receptors for

blue wavelengths. Despite this physiological fact, I still recommend using blue as the default link color. The reason is that users have grown accustomed to blue being the link color, so they have zero delay in figuring out how to work with a page if it uses blue for unvisited links. They just go: blue, click, boom. (64)

It seems that even after nearly ten years there are still some disagreements among usability experts.

The main driving force in web usability is rarely stated outright, although in *Designing Web Usability* Nielsen does state that by promoting usability standards he hopes to "increase users' quality of life by eliminating a lot of frustration and the feeling of inadequacy that follows every time you are stumped by a computer" (7). However, this statement seems a little off the mark from almost every web usability standard published by Nielsen and others to date. Historically it would seem that web usability is most concerned with creating an efficient web experience above all else. This idea is supported in Nielsen's statement above on continuing to use the standard blue link color since it lets users browse without thinking. He goes on to say "The few milliseconds lost from reading a few words in blue are more than made up for with the several seconds saved in cognitive overhead pondering a non-standard set of page colors and with the several minutes saved from improved navigation when users *know* what links they have visited before" (64, emphasis in original). Nielsen and others have attempted to denounce this emphasis on efficiency by saying that users will occasionally browse the web just for the sake of browsing and those sites that act purely as distractions in these cases can largely ignore usability concerns. But this statement seems to be in direct opposition to the guidelines being put forward for web usability. There seems to be little room in Nielsen's usability guidelines for entertainment-only sites, in addition, Nielsen, and other usability experts, seem to reject

completely the idea of web design as an art form. Even when usability experts allow for entertainment-only sites they speak of them in terms of efficiency, generally referring to such sites as distractions and to the browsing that leads to such sites as diversionary.

History of Experience Design on the Web

By no means did experience design get its start with web design. In fact, web designers have only recently begun to draw on the field of experience design. In the physical world there is a long history of designing to create an experience; theme parks are designed with the total experience in mind; Coca-Cola designed their plastic bottles to mimic the hourglass curve that defines the brand, therefore creating a consistent experience even as materials change. In his book *Experience Design 1*, Nathan Shedroff talks about one of the best, though perhaps most often overlooked, examples of experience design: shopping. For Shedroff "shopping as we know it in the real world is a complex, much more rewarding experience" than simply comparing product features and making a purchase (134). He goes on to say that "the act of shopping usually begins before we even realize it—often before we perceive the need for something—and doesn't end until we finally discard and/or replace the product" (134). To extend this discussion think of your last shopping excursion. Perhaps you went to a variety of stores including some discount stores (e.g. Wal-Mart) and some more upscale store (e.g. Banana Republic) looking for a new shirt. While both of these stores sell shirts, there is more attention paid to the total experience at Banana Republic; sales people are available to help you find not only your size but also other clothing you might like based on a few questions. This is just one aspect of experience design in action; we can't forget the effects of things like lighting, background music, store layout, and a multitude of other aspects that all contribute to building a pleasant shopping experience.

Experience design found its way into computers in the 1970s, largely through the area of interface design in the software world (Shedroff 109). Interface design played perhaps the most important role in bringing us our familiar computer desktop interfaces. More recently there seems to have been a meeting of physical world experience designers and interface designers. Products like Apple's iMac, both the original gumdrop model and especially the newer flat-panel model, seem to be striving to change not only the appearance of computers but also the overall experience of computing. Perhaps the best example of this union of experience design and interface design is Apple's portable music device, the iPod. The iPod was nowhere close to being the first MP3 player on the market, but it seems to be the first where the overall experience of using the device matters. Prior to the introduction of the iPod, MP3 players seemed to pay little attention to the overall experience; small buttons and minimal screen space made it difficult to navigate through large collections of music, small amounts of memory meant it was impossible to store more than a few CDs worth of music, and slow transfer speeds made moving even this much music from the computer to the MP3 player less than enjoyable. The iPod changed all of this: a larger screen meant that it was easier to see information on the music stored in the iPod and the unique scroll wheel made it easy for anyone to quickly navigate the entire collection of music. Apple included a 5GB hard drive in the original iPod (it is now possible to get up to 30GB), making it possible for the first time to carry up to 1,000 CD-quality songs on an MP3 player, and by utilizing a FireWire connection to transfer music users would no longer had to wait long periods of time to transfer music from their computers. Certainly the iPod addressed many of the usability issues that surrounded MP3 players previously, but as we will see later, tackling usability issues is only one part, though an important part, of building a pleasant and effective experience.

Over the past few years experience design has started to trickle into the field of web design. With the emergence of designers like Nathan Shedroff, John Lenker, Hillman Curtis, and many others, there has been a slowly shifting emphasis in web design from simple usability to building lasting and effective experiences online. Experience designers take a more holistic approach to creating web sites, as Lenker states in *Train of Thoughts: Building the Effective Web Experience*, a website "must offer more than mere simplicity and practicality to be an effective mass-communications medium. It must also offer easily comprehensible messages, emotional and social relevance, as well as aesthetic gratification" (6). The experience designer is at once a usability proponent, providing "simplicity and practicality," an information architect, creating "easily comprehensible messages," a marketing expert, providing "emotional and social relevance," and a graphic designer creating "aesthetic gratification." The experience designer works to combine each of these elements to produce an effective web site, whether that is an online encyclopedia that must provide easy access to vast amounts of content, or an experimental branding site with little content but great emotional appeal.

Unlike usability design, which can easily be thought of mainly as being concerned with efficiency, there is no single essence in experience design. Web experience designers are concerned most with building an effective experience for those using a site. However, the meaning of effective changes depending on the type and purpose of the site being built; sites providing a lot of content (like Amazon.com) require the designer to focus on information architecture and usability, some sites (such as NikeGoddess.com) may focus on creating a visually stimulating experience combined with emotionally relevant content in order to elicit some emotional response, and other sites (like jodi.org) seemingly disregard any type of standard

or focus to create an experience that challenges users. This multi-faceted approach to design is clarified by the American Institute of Graphic Arts in *What Is Experience Design*:

Experience design is:

- A different approach to design that has wider boundaries than traditional design and that strives for creating experiences beyond just products or services
- The view of a product or service from the entire lifecycle with a customer, from before they perceive the need to when they discard it
- Creating a relationship with individuals, not targeting a mass market
- Concerned with invoking and creating an environment that connects on an emotional or value level to the customer
- Built upon both traditional design disciplines in the creation of products, services, as well as environments in a variety of disciplines. ("What is Experience Design")

All of this equates to a more holistic approach that not only puts users' experiences at the foreground but also emphasizes building effective experiences for individual users.

The Debate

Web designers have found themselves embroiled in a debate over the relative merits of usability and aesthetics since almost the very beginning of the web. HTML grew out of the older SGML as a way to mark up any document for similar presentation across a wide variety of devices. In one sense, HTML is a tool to create usability; after all, some of the core elements in HTML (tables, lists, headlines, etc.) are intended to create a structured, hierarchical document that is easily understood. And this was largely how HTML was used originally; at this point the "web"

did not really exist. HTML documents served as a way for researchers to share information easily. Visual presentation was largely unimportant in this original use of HTML, but even if an author were concerned with the aesthetics of a document there was little he or she could do with the limited capabilities of early versions of HTML. It did not matter if a headline marked `<h1>` was rendered at 22pts. or at 18pts. as long as any text marked `<h1>` was given more emphasis in the hierarchy of the document than text marked `<h2>`. As more people started to use HTML and as its capabilities increased the aesthetic appearance of pages began to become more important. With more users (and more creators of content) the web became a repository for more than research; personal home pages covering a great variety of topics erupted onto the web, as did many commercial web sites. With this shift in content on the web came a shift in the people who were creating HTML documents. No longer were research scientists the only people creating documents on the web, now graphic designers were (many with backgrounds in print design) creating sites, as well as interested hobbyists and others who were not really connected to the origins of the web.

Once graphic designers began to try to imitate print layouts on the web, the debate between usability and aesthetics was set to begin. As new capabilities were added to HTML, (background color and images, font styles, blinking text, etc.) and as designers developed new ways to design with HTML (tables-based layouts, etc.) the debate grew. This debate quickly became unavoidable as the web went from a place to share research documents to a new communications medium nothing short of a cultural phenomenon. However much the debate raged on, designers often found themselves losing out to usability experts, like Nielsen, who had "evidence" to back up their claims. As Curt Cloninger remarks in "Usability Experts are from Mars, Graphic Designers are from Venus," graphic designers were "lash[ing] out blindly, saying

ill-conceived, inarticulate, un-endearing things" in response to the "easily articulatable principles of the usability experts (Cloninger).

Cloninger's article illustrates perfectly for us the long debate between usability and graphic design. However, this article is still part of the tradition wherein usability and aesthetics are fundamentally opposed forces and experience design is just a fancy way of saying "graphic design." We see this binary being set up in Cloninger's introduction where he represents usability design and graphic design as boxers in a ring: "Let the celebrity death match begin. Gentlemen, I expect a good clean fight. Come out with your hands up, and may the best paradigm win" (Cloninger). But this is a false binary since usability and graphic design are both parts of one whole: experience design. Cloninger almost touches on this: "Some sites will need intensive whiz-bang branding that Nielsen's 'principles' won't allow. Other sites will need moronically basic navigation and speedy download times that Kioken [a visually-oriented graphic web design studio] doesn't care to provide. Most sites will need a combination thereof" (Cloninger). This combination that Cloninger hints at is exactly what experience design sets out to accomplish. Cloninger quickly returns to the old binary, though, by borrowing another metaphor (one which was quickly becoming cliché at the time of his article's publication): _____ is from Mars, _____ is from Venus. Cloninger distills this metaphor to set up usability as being articulatable and graphic design as inarticulatable, again, back to the simplistic oppositional binary. By the end of the article, Cloninger again almost touches on the idea of experience design by urging both usability experts and graphic designers to be more forgiving of the other and to borrow elements from each side of the debate, but he is still working with a binary opposition in which he envisions usability experts "expounding in exile" if they are unwilling to yield somewhat to graphic design (Cloninger).

Where do we go now?

We can see, hopefully, that this usability/aesthetics binary is artificial with both acting as only parts of the larger whole that is experience design. It is time to move away from the old debate, to move away from a search for easy principles to apply in every case. It is time to take the cue from designers (and authors) like Shedroff and Lenker, to view the web as a chance to communicate with the masses in very individual ways through building effective experiences. These designers know that building an effective, memorable web site is not as simple as producing an infinitely usable site or using the latest technology to create amazing visual effects, but that building an effective web experience (and any experience for that matter) is a subtle combination of usability, aesthetics, and many other elements of design.

Works Cited

What Is Experience Design?. American Institute of Graphic Arts. 23 April 2003

<<http://www.aiga.org/content.cfm?CategoryID=479>>.

Cloninger, Curt. *Usability Experts Are From Mars Graphic Designers Are From Venus*. A List

Apart. 23 April 2003 <<http://www.alistapart.com/marsvenus>>.

Lenker, John C. Jr. *Train of Thoughts: Designing the Effective Web Experience*. Indianapolis:

New Riders, 2002.

Lynch, Patrick J. and Sarah Horton. *Web Style Guide: Basic Design Principles for Creating*

Websites. 2nd end. New Haven: Yale University Press, 2001.

Nielsen, Jakob. *Designing Web Usability*. Indianapolis: New Riders, 2000.

Shedroff, Nathan. *Experience Design 1*. Indianapolis: New Riders, 2001.